REMARKS

Entry of this amendment and favorable consideration of this application are respectfully requested.

The specification has been amended herein to include the priority information contained in Applicants' data sheet filed with the instant application. Claims 1 and 3-8 have been amended herein and claims 14-26 have been cancelled, thus claims 1-13 are currently pending in this application.

In the Office Action mailed June 17, 2004 (the "Final Office Action"), the Examiner has made final the rejection of Claims 1-13 under 35 U.S.C. §102(b) as being anticipated by "Pharmacology and Biological Efficacy of a Recombinant, Humanized, Single-Chain Antibody C5 Complement Inhibitor in Patients Undergoing Coronary Artery Bypass Graft Surgery With Cardiopulmonary Bypass" written by Fitch et al., published by Circulation in 1999 (hereinafter referred to simply as "Fitch"). This rejection is respectfully traversed.

According to the Examiner, the claims are drawn to any myocardial infaction, not a large myocardial infarction. This, however, ignores the limitation of claim 1 that its method is to "prophylaxis against myocardial infarctions which exhibit CK-MB levels greater than about 50 nano-grams/ml in a subject". As previously noted, a large myocardial infarction is defined in applicants' specification as those which exhibit peak blood levels of CK-MB greater than about 50ng/ml. (See, Specification at page 3, lines 23-25.) However, in the interest of advancing prosecution, applicants have amended

claim 1 to recite a method for the prophylaxis of large myocardial infarctions, i.e., those which exhibit peak CK-MB levels greater than about 50 nano-grams/ml.

The Examiner goes on to assert that myocardial infarctions fall within the scope of the myocardial injury described by Fitch and that preventing myocardial infarction related to CPB is within the scope of significant reductions in postoperative myocardial injury as described by Fitch. Nowhere, however, does Fitch teach or suggest any methods for ***prophylaxis against large myocardial infarctions*** in patients undergoing a procedure that involves CPB.

Rather, in discussing his results, Fitch merely makes the general statement that the "reported incidence of MI after CABG surgery ranges from 1% to 10%" (see page 11 of Fitch) and then discloses some general data and conclusions about "myocardial injury". These conclusions include the statements "C5 inhibition significantly attenuates postoperative myocardial injury" (see Conclusions section on page 2) and "...the potent inhibitory and anti-inflammatory effects of h5G1.1-scFv were associated with significant reductions in postoperative myocardial injury." (see top of page 11).

Moreover, Fitch describes myocardial injury as "perioperative Q-wave or non-Q-wave myocardial infarction (MI) or as severe ventricular dysfunction requiring circulatory assist." (See Fitch at page 2.) In discussing his results, Fitch acknowledges

> "Mechanisms for MI after CABG are likely multifactorial and include preoperative, intraoperative, and postoperative ischemic times, postoperative reperfusion, systemic inflammation, and inadequate revascularization. According to postmortem studies, 80% to 92% of post-CABG MIs occur ***without clinical evidence of transmural infarction***. Elevated postoperative CK-MB levels are associated with an increasing incidence of postoperative ventricular regional wall motion abnormalities and decreased global left ventricular ejection fraction in the

> early post-CABG period, which can persist for up to 9 months ***regardless of the presence of Q waves on ECG.***" (Emphasis added.)

Thus, these statements by Fitch regarding myocardial injury suggest ventricular dysfunction, not MI, is correlated with CK-MB. Moreover, these statements contradict the Examiner's assertion that "the decrease in myocardial infarction is an inherent property of the method taught by Fitch." Accordingly, Fitch does not anticipate the present claims to methods of prophylaxis against large myocardial infarctions and does not form a basis for concluding that the present claims to methods of prophylaxis against large myocardial infarctions would be obvious.

Fitch also fails to report post-operative, peak CK-MB levels in patients undergoing a procedure that involves CPB. Rather, Fitch merely reports total (i.e., cumulative) CK-MB levels. Specifically, in the "Analysis of Myocardial Injury" section on page 8, Fitch states:

> "To assess myocardial injury, the ***total release of CK-MB was measured*** during the 24 hours after drug administration. Total CK-MB was significantly less ($P<0.05$) in patients treated with 2.0 mg/kg h5G1.1-scFv than in those given placebo..." (Emphasis added.)

Furthermore, in the legend to Figure 4 on page 8 Fitch states:

> "Myocardial injury was determined in CPB patients by measurement of the ***cumulative release of CK-MB*** over 24 hours." (Emphasis added.)

Because Fitch fails to report post-operative, individual CK-MB levels in patients undergoing a procedure that involves CPB, Fitch cannot possibly anticipate the presently claimed methods of prophylaxis against myocardial infarctions which exhibit peak blood

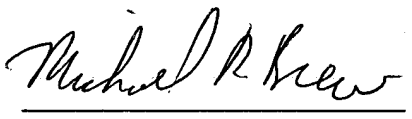
levels of CK-MB greater than about 50ng/ml. Furthermore, Fitch's disclosure of total (i.e., cumulative) CK-MB levels does not render obvious the presently claimed methods of prophylaxis against large myocardial infarctions which exhibit peak blood levels of CK-MB greater than about 50ng/ml. Fitch simply has no disclosure one way or the other with respect to any increase or decrease in myocardial infarctions of the recited magnitude.

In addition, Fitch states on page 11 that based on his cumulative findings, "there does not appear to be a threshold effect". However, the present inventors have shown using measurements of peak CK-MB blood levels (as compared to Fitch's cumulative data), that an anti-inflammatory compound provides significant prophylaxis only against ***large*** myocardial infarction (i.e., myocardial infarction where the peak CK-MB level is greater than about 50 ng/ml). More specifically, as seen in Figure 2 of applicants' specification, the placebo and anti-inflammatory compound curves diverge significantly only for peak CK-MB levels in excess of 50 ng/ml. This unexpected result is nowhere taught or suggested by Fitch, who only reports cumulative CK-MB levels and makes general conclusions regarding "myocardial injury."

For at least the foregoing reasons, it is respectfully submitted that Fitch fails to teach or suggest any methods for prophylaxis against large myocardial infarctions having peak CK-MB levels greater than about 50 ng/ml. Withdrawal of the rejection of claims 1-13 under 35 U.S.C. §102(b) as anticipated by Fitch is thus appropriate and is respectfully requested.

In view of the foregoing, this application is believed to be in condition for immediate allowance. Such early and favorable action is earnestly solicited.

Respectfully submitted,



Michael R. Brew
Reg. No. 43,513
Attorney for Applicants

Carter, DeLuca, Farrell & Schmidt, LLP
445 Broad Hollow Road - Suite 225
Melville, New York 11747
(631) 501-5700
(631) 501-3526 (fax)
PD/MRB/jjp